

ABSTRACT OF THE DISCLOSURE

The present invention relates to an immunogenic conjugate comprising a carrier molecule coupled to an autoinducer of a Gram negative bacteria. The immunogenic conjugate, when combined with a pharmaceutically acceptable carrier, forms a suitable vaccine for mammals to prevent infection by the Gram negative bacteria. The immunogenic conjugate is also used to raise and subsequently isolate antibodies or binding portions thereof which are capable of recognizing and binding to the autoinducer. The antibodies or binding portions thereof are utilized in a method of treating infections, a method of inhibiting autoinducer activity, and in diagnostic assays which detect the presence of autoinducers or autoinducer antagonists in fluid or tissue samples.